## **Mechanical Engineers (17-2141)**

**Occupation description:** Perform engineering duties in planning and designing tools, engines, machines, and other mechanically functioning equipment. Oversee installation, operation, maintenance, and repair of equipment such as centralized heat, gas, water, and steam systems.

### **Employment and Job Openings**

|                      | Average employment |                 |                | Avera  | nge annual openi | ngs   |
|----------------------|--------------------|-----------------|----------------|--------|------------------|-------|
|                      | 2010 estimate      | 2020 projection | Percent change | Growth | Replacement      | Total |
| Alaska               | 307                | 326             | 6.2            | 2      | 7                | 9     |
| <b>United States</b> | 243,200            | 264,600         | 8.8            | 2,130  | 7,830            | 9,960 |

#### Job outlook

Alaska: Alaska's employment growth is low with moderate employment opportunities. Read more.

#### 2013 Wages 🛭

|                                    | Mean Wage and<br>95% Confidence Interval |       |       | Wage by Percentile |        |       |
|------------------------------------|--|-------|-------|--------------------|--------|-------|
|                                    | Low                                      | Mean  | High  | 10th               | Median | 90th  |
| United States                      | n/a                                      | 41.31 | n/a   | 25.27              | 39.47  | 59.30 |
| Alaska                             | (2)                                      | (3)   | (2)   | 31.90              | 48.60  | (1)   |
| Anchorage/Mat-Su Area (MSA)        | (2)                                      | (3)   | (2)   | 33.45              | 49.92  | (1)   |
| Fairbanks North Star Borough (MSA) | 35.88                                    | 45.29 | 54.70 | 21.20              | 39.45  | 80.80 |
| Balance of State                   | (2)                                      | (3)   | (2)   | 21.52              | 52.45  | 86.04 |

- (1) indicates an hourly wage greater than \$90, or an annual wage greater than \$187,200.
- (2) indicates that the confidence interval value could not be calculated.
- (3) indicates that the estimates are not available.

#### **Labor Force Indicators**

| 2012 Worker Characteristics |                     |                     |                     |                     |  |
|-----------------------------|---------------------|---------------------|---------------------|---------------------|--|
| <b>Total workers</b>        | Nonresident workers | Percent nonresident | Percent age 45 plus | Percent age 50 plus |  |
| 341                         | 96                  | 28.2                | 38.8                | 32.5                |  |

| 2012 Potential Supply                         |    |  |  |  |
|---|----|--|--|--|
| Qualified but working in another occupation   | 63 |  |  |  |
| Currently employed in a lower paid occupation | 30 |  |  |  |
| UI claimants previously working in occupation | 53 |  |  |  |

### 2012 ALEXsys Employment Data

| Number of registrants                         | 266 |
|---|-----|
| Number of job position postings               | 114 |
| Ratio of registrants to job position postings | 2.3 |

# Typical Entry-level Education, Experience, and/or On-the-job Training

Education: Bachelor's degree Work experience: None On-the-job training: None

## Training Resources

|   | Degree |
|---|--------|
| Alaska Computer Business Solutions LLC  |        |
| AutoCAD 2013 Essentials                 |        |
| AutoCAD 2014 Advanced                   |        |
| AutoCAD 2014 Beyond the Basics          |        |
| AutoCAD 2014 Essentials                 |        |
| AutoCAD 2014 Update from 2012/2013      |        |
| AutoCAD Civil 3D 2014 Fundamentals      |        |
| AutoCAD Civil 3D Surveyors              |        |
| Drafting and Design Technology Program  |        |
| Revit MEP 2014 Fundamentals             |        |
|   |        |
|   | Degree |
| University of Alaska Anchorage          |        |
| Mechanical Engineering                  | MS     |
|   |        |
|   | Degree |
| University of Alaska Fairbanks          |        |
| Mechanical Engineering                  | BS     |
| Mechanical Engineering                  | MS     |
|   |        |
|   | Degree |
| Vocational Training and Resource Center |        |
| Drafting with AutoCAD                   |        |

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